

## Claims

1. Method for determining an error rate in a data transmission from a transmitter/receiver station (1) to a transmitter/receiver device (2), wherein a first data block and at least one further, redundant data block different from the latter are generated by the transmitter/receiver station (1) from an original data block (9) and, in the event of an error transmission of the first data block, a further, redundant data block is requested by the transmitter/receiver device (2), comprising the following procedural stages:

  - transmission of a first data block by the transmitter/receiver station (1),
  - reception of the first data block by the transmitter/receiver device (2),
  - decoding of the first data block received in a decoding block (8),
  - checking the first data block for transmission errors,
  - requesting a further, redundant data block for error correction, if an error is determined in the transmitted data of the first data block,
  - reception of the request in the transmitter/receiver station (1),

**characterised by**

  - retransmission of the first data block instead of a redundant data block, and
  - determination of the rate of the incorrectly received first data blocks.
2. Method according to claim 1,

**characterised in that**

the first data block and the further, redundant data blocks are generated by convolutional coding with different punctuation schemes.

5

3. Method according to claim 2,

**characterised in that**

the punctuation scheme used for the generation of the first data block is determined.

10

4. Method according to any one of claims 1 to 3,

**characterised in that**

the different, redundant data blocks are stored in a memory (14) of the transmitter/receiver station (1) and that the first data block stored in a memory position (15.1) assigned to the first data block is transmitted in the event of a request for the further data block.

15

- 20 5. Method according to any one of claims 1 to 3,

**characterised in that**

the first data block is also stored in a memory (14) of the transmitter/receiver station (1) instead of the different, redundant data blocks and in their respective memory positions (15.2, 15.3), and that the data block stored in the respective memory position (15.2, 15.3) is transmitted in the event of a request for a further data block.

25

- 30 6. Method according to any one of claims 1 to 3,

**characterised in that,**

a further, redundant data block is additionally transmitted by the transmitter/receiver station (1) in the event of a request for a further data block,

in order to compare the determined error rate without error correction with an error rate with error correction by incremental redundancy.

- 5     7.     Measuring device for determining an error rate in  
the event of a data transmission from a  
transmitter/receiver station (1) to a  
transmitter/receiver device (2), wherein the  
transmitter/receiver station (1) provides a coding  
10     block (3) for generating from an original data  
block (9) a first data block and at least one  
further, redundant data block different from  
latter, and a selection device (16) for selecting a  
data block to be transmitted,  
15     **characterised in that**  
the first data block is retransmitted by the  
transmitter/receiver station (1) instead of a  
redundant data block in response to a request for a  
further, redundant data block communicated by the  
20     transmitter/receiver device (2) to the  
transmitter/receiver station (1) because of a error  
transmission of the first data block.
- 25     8.     Measuring device according to claim 7,  
**characterised in that**  
a memory (14) with several memory positions (15.1,  
15.2, 15.3) is provided in the coding block (3) for  
the storage of data blocks.
- 30     9.     Measuring device according to claim 8,  
**characterised in that**  
different punctuation schemes are used for the  
generation of the respective data blocks, and that

the punctuation scheme used for the generation of the first data block can be selected.

10. Measuring device according to any one of claims 7  
5 to 9,

**characterised in that**

the first data block can be selected by the  
selection device (16) from the memory (14), where  
it is stored, independently of the request from the  
10 transmitter/receiver device (2).

11. Measuring device according to claim 7 or 8,

**characterised in that**

the first data block is stored instead of the  
15 further, different, redundant data blocks at their  
respective memory positions (15.2, 15.3) in a  
memory (14).

12. Method according to claim 7 or 8

20 **characterised in that**

a further, redundant data block is selected by the  
selection device (16) in the event of a request by  
the transmitter/receiver device (1) in order to  
compare the determined error rate without error  
25 correction with an error rate with error correction  
by incremental redundancy.